Genitourinary Medicine

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This *Journal*, founded by the Medical Society for the Study of the Venereal Diseases, publishes original work on the investigation and treatment of genitourinary and allied disorders, and review articles, correspondence, and abstracts.

Advice to authors Papers for publication, which will be accepted on the understanding that they have not been and will not be published elsewhere and are subject to editorial revision, should be sent in duplicate to Dr A Mindel, Academic Department of Genitourinary Medicine, James Pringle House, Middlesex Hospital, London W1N 8AA. All authors must give signed consent to publication. The editor should be notified of any change of address of the corresponding author. Manuscripts will only be acknowledged if a stamped addressed postcard or international reply coupon is enclosed.

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(1) *Scripts* (*including correspondence and book reviews*) must be typewritten on one side of the paper in double spacing with ample margins. Two copies should be sent; if a paper is rejected, one copy will be retained.

(2) *Each script* should include, in the following order: a brief summary, typed on a separate sheet, outlining the main observations and conclusions; the text divided into appropriate sections; acknowledgements; references; tables, each on a separate sheet; and legends for illustrations.

(3) *The title* of the paper should be as brief as possible.

(4) *The number of authors* should be kept to the minimum, and only their initials and family names used.

(5) *Only the institution(s)* where work was done by each author should be stated.

(6) *SI units* are preferred. If old fashioned units are used, SI units should be given in parentheses or, for tables and figures, a conversion factor given as a footnote.

(7) *Only recognised abbreviations* should be used.

(8) *Acknowledgements* should be limited to workers whose courtesy or help extended beyond their paid work, and supporting organisations.

(9) *Figures* should be numbered in the order in which they are first mentioned, referred to in the text, and provided with captions typed on a separate sheet. (*Diagrams:* use thick, white paper and insert lettering lightly in pencil. *Photographs:* should be marked lightly on the back with the author's name and indicating the top, and should not be attached by paper clips or pins. They should be trimmed to include only the relevant section (sizes 2¼″ or 5¼″ wide, maximum 5¼″ × 7″) to eliminate the need for reduction. Photomicrographs must have internal scale markers. *X* ray films should be submitted as photographic prints, carefully prepared so that they bring out the exact point to be illustrated.

(10) *Tables* should be numbered, have titles, and be typed on separate sheets. Please avoid large tables.

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Notices

Organisers of meetings who wish to insert notices should send details to the editor (address on the inside front cover) at least eight months before the date of the meeting or six months before the closing date for applications.

International Union against the Venereal Diseases and Treponematoses (IUVDT)—sixth regional conference of the South East Asian and Western Pacific branch

The sixth regional conference of the South East Asian and Western Pacific branch of the IUVDT will be held on 13–15 September 1989 in Darwin, Northern Territory, Australia, to talk about sexually transmissible diseases including AIDS.

For further information please contact IUVDT Darwin Conference, Communicable Diseases Centre, PO Box 41096, Casuarina, NT 5792, Australia.

International Union against Venereal Diseases and the Treponematoses (IUVDT)—35th general assembly

The 35th general assembly of the IUVDT will be held on 9–11 May 1990 at the Royal Society of Medicine, London. The subject will be "Sexually transmitted diseases in the age of AIDS".

For further details please contact Barbara Komoniewska BA, Assistant Medical Services Secretary, Royal Society of Medicine, 1 Wimpole Street, London W1M 8AE (01 408 2119, telex 298902 ROYMED G).

Northern Genitourinary Physicians Colposcopy Group

The increasing incidence of cervical intraepithelial neoplasia (CIN) and infection with human papillomavirus (the possible aetiological agent of CIN) in patients attending genitourinary medicine (GUM) clinics has led to colposcopy being used in many clinics. To discuss problems associated with providing a colposcopy service and to promote research into diagnosing and treating sexually transmitted disease of the cervix in relation to CIN and colposcopy, 18 GUM consultants from northern England (north of Birmingham and south of Scotland) inaugurated a colposcopy group on 12 November 1988, with Dr D A Hicks of the Royal Hallamshire Hospital, Sheffield, as president. Membership of the group is open to all colleagues in this geographical area.

Details of membership are available from the honorary secretary, Dr A B Alawattegama, Academic Department of Genitourinary Medicine, Royal Liverpool Hospital, Prescot Street, Liverpool L7 8XP, (051 709 0141).

International congress on viral infections as a cause of sexually transmitted diseases

The Dutch Society for the Study of Sexually Transmitted Diseases is holding an international congress on "Viral infections as a cause of STD" in Amsterdam on 17 and 18 November 1989.

For further information please contact Hoboken Congress Organisation, Erasmus University Rotterdam, PO Box 1738, 3000 DR Rotterdam, The Netherlands.

***Artificial Intelligence in Medicine*—call for papers**

The next two volumes of the new international quarterly journal, *Artificial Intelligence in Medicine*, vol 2 (1990) and vol 3 (1991), will be devoted to studies in medical knowledge engineering. Papers on all aspects of medical expert systems, including their designing, application and evaluation, are welcome. Contributions should be sent to the editor: Professor KS Zadeh, University of Münster Hospital, Department of Medical Informatics, Münster, West Germany 4400.

Electronic manuscripts are preferred. Details and instructions for authors may be obtained from the publisher: Burgverlag, PO Box 1247, Tecklenburg, West Germany 4542.

The Medical Society for the Study of Venereal Diseases (MSSVD) Undergraduate Prize — Regulations

1 A prize of £150·00, to be called the MSSVD Undergraduate Prize, will be awarded annually by the MSSVD (provided an entry of a suitable standard is received).

2 Entries for the prize will take the form of a report written in English.

3 The subject of the report should be related to sexually transmitted disease, genitourinary medicine, or human immunodeficiency virus (HIV) related infection.

4 The report should concern original and unpublished observations made by the entrant. The report, which should not exceed 2000 words, should include an introduction to the subject, methods used to make the observations, findings, and discussion. A summary of the report should also be provided on a separate sheet. Entries must be machine or type written, with double spacing, on one side only of A4 paper. Three copies must be submitted.

5 The subject must be approved by a genitourinary physician at the entrant's medical school. The observation must be made before full registration. A winner may not enter for the prize again. Each entry should be accompanied by a declaration that these conditions have been fulfilled.

6 Entries should be submitted to the honorary secretary of the MSSVD by June 30 each year. They will then be considered by the president, the honorary secretary, and the honorary treasurer. When appropriate other experts may be consulted. These assessors will make recommendations to council, who will make the final decision concerning the prize.

7 Entries must be submitted within 12 months of full registration or its equivalent.

8 Regulations are obtainable from the honorary secretary of the MSSVD.

9 The assessors may ask the editor of an appropriate journal to consider an entry for publication. If so, it will be received for publication in the usual way.

Genitourn Med 1989;**65**:206–12

List of current publications

Selected abstracts and titles from recent reports published worldwide are arranged in the following sections:

Syphilis and other treponematoses
Gonorrhoea
Non-specific genital infection and related disorders (chlamydial infections; mycoplasmal and ureaplasmal infections; general)
Pelvic inflammatory disease
Reiter's disease
Trichomoniasis
Candidiasis
Genital herpes
Genital warts
Acquired immune deficiency syndrome
Other sexually transmitted diseases
Genitourinary bacteriology
Public health and social aspects
Miscellaneous

Syphilis and other treponematoses

Cultivation of cottontail rabbit epidermal (Sf IEp) cells on microcarrier beads and their use for suspension cultivation of *Treponema pallidum* subsp *pallidum*
BS RILEY, DL COX (Fort Worth, USA). *Appl Environ Microbiol* 1988;**54**:2862–5.

Invasion of the central nervous system by *Treponema pallidum*: implications for diagnosis and treatment
SA LUKEHART, EW HOOK III, SA BAKER-ZANDER, AC COLLIER, CW CRITCHLOW, HH HANDSFIELD (Seattle, USA). *Ann Intern Med* 1988;**109**:855–62.

Diagnostic problems in neurosyphilis
W BEHR, J BARNERT, M WIENBECK (Augsberg, Federal Republic of Germany). *Dtsch Med Wochenschr* 1988;**113**:1718–22.

Quaternary neurosyphilis
S MORGELLO, H LAUFER (New York, USA). *N Engl J Med* 1988;**319**:1549–50.

Intracranial gumma presenting as a cerebral tumour
HS PALL, AC WILLIAMS, RA STOCKLEY (Birmingham, England). *J R Soc Med* 1988; **81**:603–4.

How much penicillin cures early syphilis?
DM MUSHER (Houston, Texas). *Ann Intern Med* 1988;**109**:849–50.

Characterization of the components in circulating immune complexes from infants with congenital syphilis
SRM DOBSON, LH TABER, RE BAUGHN (Houston, Texas). *J Infect Dis* 1988;**158**:940–7.

Clinical aspects and usefulness of indirect absorbed immunofluorescence for diagnosis of yaws in Central Africa
PMV MARTIN, JP GONZALEZ, MH MARTIN, MC GEORGES-COURBOT, MJ PALISSON, AJ GEORGES (Bangui, Central African Republic). *J Clin Microbiol* 1988;**26**:2432–3.

Gonorrhoea

Serological confirmation of *Neisseria gonorrhoeae* by monoclonal antibody-based coagglutination procedures
CM ANAND, SM GUBASH, H SHAW (Calgary, Canada). *J Clin Microbiol* 1988;**26**:2283–6.

In-vitro activity of ofloxacin against isolates of *Neisseria gonorrhoeae*
A MCEWEN, G ROBERTS (Manchester, England). *J Antimicrob Chemother* 1988; **22**suppl:21–6.

The efficacy of ofloxacin against infection caused by *Neisseria gonorrhoeae* and *Chlamydia trachomatis*
SJ RICHMOND, MN BHATTACHARYYA, M MAITI, FH CHOWDHURY, RM STIRLAND, JA TOOTH (Manchester, England). *J Antimicrob Chemother* 1988;**22**suppl:155–8.

Fleroxacin versus standard therapy in gonococcal urethritis
A LASSUS, O-V RENKONEN, J ELLMEN (Helsinki, Finland. *J Antimicrob Chemother* 1988;**22**suppl:223–6.

Tetracycline-resistant *Neisseria gonorrhoeae*
J HERMITAGE, PM HAWKEY (Leeds, England). *J Antimicrob Chemother* 1988;**22**:575–8.

Non-specific genital infection and related disorders (chlamydial infections)

Antibodies to *Chlamydia trachomatis* and risk for tubal pregnancy
MD WALTERS, CA EDDY, RS GIBBS, J SCHACHTER, AEC HOLDEN, CJ PAUERSTEIN (San Antonio, USA). *Am J Obstet Gynecol* 1988;**159**:942–6.

Improved Syva Microtrak *Chlamydia trachomatis* direct test method
BA JUDSON, PP LAMBERT (Palo Alto, USA). *J Clin Microbiol* 1988;**26**:2657–8.

Clinical efficacy and tolerance of fleroxacin in patients with urethritis caused by *Chlamydia trachomatis*
RA PUST, HR ACKENHEIL-KÖPPE, W WEIDNER, H MEIER-EWERT (Munich, Federal Republic of Germany). *J Antimicrob Chemother* 1988;**22**suppl:227–30.

Efficacy of ofloxacin in the treatment of non-gonococcal urethritis in men and genital infections caused by *Chlamydia trachomatis* in men and women
AT NAYAGAM, GL RIDGEWAY, JD ORIEL (London, England). *J Antimicrob Chemother* 1988;**22**suppl:155–8.

Non-specific genital infection and related disorders (mycoplasmal and ureaplasmal infections)

Alternative therapy for genital mycoplasma infections
JA ROBERTSON (Edmonton, Canada). *Eur J Clin Microbiol Infect Dis* 1988;**7**:603–5.

Reiter's disease

Atrioventricular conduction disturbance as an early feature of Reiter's syndrome
JV HAVERMAN, GA VAN ALBADA-KUIPERS, HJM DOHMEN, BAC DIJKMANS (Leiden, The Netherlands). *Ann Rheum Dis* 1988;**47**:1017–20.

Trichomoniasis

Effect of DL-α-difluoromethylornithine on polyamine synthesis and interconversion in *Trichomonas vaginalis* in a semi-defined medium (MPB 01019)
N YARLETT, CJ BACCHI (New York, USA). *Mol Biochem Parasitol* 1988;**31**:1–10.

Genital herpes

Herpes simplex virus detection by macroscopic reading after overnight incubation and immunoperoxidase staining
T ZEIGLER, M WARIS, M RAUTIAINEN, P ARSTILA (Turku, Finland). *J Clin Microbiol* 1988;**26**:2013–7.

Modified spin-amplified absorption procedure with conventional tissue culture tubes for rapid detection and increased recovery of herpes simplex virus from clinical specimens
PE OEFINGER, SH LOO, RMG ANDER (Houston, USA). *J Clin Microbiol* 1988;**26**:2195–9.

Antibody response of the newborn after herpes simplex virus infection
J KAHLON, RJ WHITLEY (Birmingham, USA). *J Infect Dis* 1988;**158**:925–33.

Genital herpes during pregnancy
J KELLY (Birmingham, England). *Br Med J* 1988;**297**:1146–7.

Genital warts

Human papillomavirus type-52—a new virus associated with cervical neoplasia
K SHIMODA, AT LORINCZ, GF TEMPLE, WD LANCASTER (Washington, USA). *J Gen Virol* 1988;**69**:2925–8.

Does HPV cause cervical cancer?
HC KITCHENER (Aberdeen, Scotland). *Br J Obstet Gynaecol* 1988;**95**:1089–91.

High prevalence of genital tract papillomavirus infection in female adolescents
J MARTINEZ, R SMITH, M FARMER, *et al* (Miami, USA). *Pediatrics* 1988;**82**:604–8.

Detection of human papillomavirus in normal and dysplastic tissue by the polymerase chain reaction
D SHIBATA, YS FU, JW GUPTA, KV SHAH, N ARNHEIM, WJ MARTIN (Los Angeles, USA). *Lab Invest* 1988;**59**:555–9.

Genital papillomavirus infection after treatment for cervical intraepithelial neoplasia (CIN) III
P BISTOLETTI, A ZELLBI, J MORENO-LOPEZ, A HJERPE (Huddinge, Sweden). *Cancer* 1988;**62**:2056–9.

One hundred and fifty women who had had a cone biopsy for histologically proved cervical intraepithelial neoplasia (CIN) III three months to three years previously were entered prospectively into a study to look for evidence of genital human papillomavirus (HPV) infection by means of cervical cytology and colposcopically directed biopsies of the cervix and vulva. Of 77 of these women who underwent immunohistolochemical studies, 36 had cone biopsy margins affected by CIN, and 41 had free margins. Ten randomly selected women had unfixed cervical tissue taken for DNA analysis for HPV 6/11 and 16/18.

Although genital warts were visible on examination in only 10/150 (7%) women, 98/150 (65%) had acetowhite areas visible when examined colposcopically. Routine cervical cytology showed koilocytosis in only 3/150 (2%) cervical smears, but koilocytes were present in 87/142 (61%) of specimens obtained by colposcopically directed cervical biopsies. Koilocytes were also present in 91/145 (63%) of vulval biopsy specimens, and an additional 12/145 (8%) showed vulval intraepithelial neoplasia. Concomitant infection of the cervix and vulva was shown in 79/142 (56%) of those biopsied, and 120/142 (85%) women had evidence of koilocytosis in either vulval or cervical tissues. All patients who had a recurrence of their CIN had evidence of koilocytosis. The prevalence of HPV infection was similar irrespective of whether the cone biopsy margins had been affected or were free of disease, although the recurrence rate of CIN was greater in the former. Of eight women who had a hysterectomy for recurrent neoplasia, five showed evidence of koilocytes in vaginal biopsy specimens, two of which showed vaginal intraepithelial neoplasia.

HPV capsid antigen was detected in 35/77 cervical and 20/41 vulval specimens, and antigen was detected at both sites in 22% (9/41) women.

Viral DNA related to HPV 6/11 was detected in all (10/10) randomly selected cervical biopsy specimens and, whereas HPV 16/18 was detected in only two of these, koilocytes were detected histopathologically in 8/10.

The results of the study are difficult to interpret because they present the proportion of positive biopsy results rather than positive results/site/woman, which would have been more meaningful.

From their results the authors conclude that subclinical genital HPV infection was 10 times more prevalent than genital warts. They also state that women previously treated for CIN III showed a higher prevalence of genital HPV infection than external controls, although they make no mention of how well matched these controls were. Their results show that HPV infects more than one anatomical site, as it was found in 85% (120/142) of cervical or vulval, or both, biopsy specimens. Unfortunately, they do not make any comment as to whether there was a clinical, colposcopic, or histological difference between the two patients who were infected with HPV 16/18 in addition to HPV 6/11 and the eight who had evidence of HPV 6/11 only. The authors propose that strategies for control of cervical cancer should include primary prevention of STD and secondary prevention of preinvasive cervical lesions, including cervical HPV infection, although they themselves have shown the multifocal nature of this disease and that it is difficult to eradicate surgically. What treatment do they advise for the widespread HPV infection they found in 120 out of 150 women they biopsied?

Frances M Cowan

Human papillomavirus in paired normal and abnormal cervical biopsies—implications for treatment
LJ CASSIDY, A CHUDLEIGH, JH KENNEDY, JCM

MACNAB (Glasgow, Scotland). *Br J Obstet Gynaecol* 1988;**95**:1092–5.

Factors associated with progression of human papillomavirus (HPV) infection into carcinoma in situ during a long-term prospective follow up
K SYRJÄNEN, R MÄNTYJÄRVI, S SAARIKOSKI, *et al* (Kuopio, Finland). *Br J Obstet Gynaecol* 1988;**95**:1096–102.

Intraepithelial neoplasia, human papillomavirus infection and argyrophilic nucleoprotein in cervical epithelium
M EGAN, M FREETH, J CROCKER (Wolverhampton, England). *Histopathology* 1988;**13**: 561–8.

Adenocarcinoma of the cervix associated with human papillomavirus
SP WILCZYNSKI, J WALKER, S-Y LIAO, S BERGEN, M BERMAN (Irvine, USA). *Cancer* 1988;**62**:1331–6.

Topical interferon for treating condyloma acuminata in women
S KEAY, N TENG, M EISENBERG, B STORY, PW SELLERS, TC MERIGAN (Stanford, USA). *J Infect Dis* 1988;**158**:934–9.

Acquired immune deficiency syndrome

The natural history of human immunodeficiency virus infection
AR LIFSON, GW RUTHERFORD, HW JAFFE (San Francisco, USA). *J Infect Dis* 1988;**158**: 1360–7.

Predicting who will progress to AIDS
AR MOSS (San Francisco, USA). *Br Med J* 1988;**297**:1067–8.

Serum neopterin levels as predictor of AIDS
JR BOGNER, A MATUSCHKE, B HEINREICH, E EBERLE, F-D GOEBEL (Munich, Federal Republic of Germany). *Klin Wochenschr* 1988;**66**:1015–8.

Testing for markers to HIV reconsidered
J CRASKE (Manchester, England). *Serodiagnosis and Immunotherapy* 1988;**2**:241–50.

Antigen testing in HIV-1 infection
DJ JEFFRIES (London, England). *Serodiagnosis and Immunotherapy* 1988;**2**:233–40.

Interrelations of lymphocyte subset values, human immunodeficiency virus antibodies and HIV antigen levels of homosexual men in San Francisco
JF KROWKA, OP STITES, AR MOSS, *et al* (San Francisco, USA). *Diagn Clin Immunol* 1988;**5**:381–7.

Comparison of sensitivities and specificities of latex agglutination and an enzyme-linked immunosorbent assay for the detection of antibodies to the human immunodeficiency virus in African sera
HL FRANCIS, M KABEYA, N KAFUAMA (Baltimore, USA). *J Clin Microbiol* 1988;**26**: 2462–4.

Envelope cross-reactivity in Western blot for HIV-1 and HIV-2 may not indicate dual infection
RS TEDDER, T O'CONNOR, A HUGHES, H N'JIE, T CORRAH, H WHITTLE (London, England). *Lancet* 1988;ii:927–30.

Mixed human immunodeficiency virus (HIV) infection in an individual: demonstration of both HIV type 1 and type 2 proviral sequences by using polymerase chain reaction
M RAYFIELD, K DE COCK, W HEYWARD, *et al* (Atlanta, USA). *J Infect Dis* 1988;**158**: 1170–6.

Optimal conditions for recovery of the human immunodeficiency virus from peripheral blood mononuclear cells
BA CASTRO, CD WEISS, LD WIVIOTT, JA LEVY (San Francisco, USA). *J Clin Microbiol* 1988;**26**:2371–6.

Reversal of positive serology for human immunodeficiency virus
LH PERRIN, R ZUBLER, B HIRSCHEL, *et al* (Geneva, Switzerland). *Schweiz Med Wochenschr* 1988;**118**:1641–4.

Infection and replication of HIV-1 in purified progenitor cells of normal human bone marrow
TM FOLKS, SW KESSLER, JM ORENSTEIN, JS JUSTEMENT, ES JAFFE, AS FAUCI (Atlanta, USA). *Science* 1988;**242**:919–22.

Bone marrow derived myeloid progenitors give rise to the cells of the mononuclear phagocyte system, promonocytes giving rise to circulating monocytes that migrate to the tissues and mature into phagocytic macrophages. HIV-1 can invade and replicate within CD4 antigen bearing cells of this lineage, and infection of the bone marrow precursors has been postulated. Investigation of this has, however, been hampered by the difficulties experienced in obtaining a sufficiently pure sample of cells to study. Folks *et al* have overcome this by using a new technique to extract a subset of bone marrow cells (taken from cadaver donors) that expressed CD34 antigen, which were isolated by adsorption to magnetic beads attached to anti-CD34 monoclonal antibodies and selected out by a magnetic field. The cells were then dissociated from the beads and found to be almost 100% pure by standard immunofluorescence techniques. None expressed CD4 antigen, or any other myeloid, T lymphocyte, or natural killer cell markers. The cells were then incubated with HIV-1 for 24 hours and cultured for 75 days. After about a month reverse transcriptase activity could be detected in the supernatants of these cultures, and this progressively increased. Electron microscopy subsequently showed budding and mature viral particles in more than 50% of the cells. By 40–60 days the cells had developed into mature CD4 positive monocytes.

It therefore seems that bone marrow precursor cells can be infected in vitro with HIV-1 before they express CD4, or when it is expressed at undetectably low levels, and that this infection persists as they differentiate into monocytes without producing a cytopathic effect on the host cell. The bone marrow may act as a reservoir for retroviral infection, as is seen in the feline leukaemia virus, which resides predominantly in myelomonocytic precursors. In vivo, however, it is difficult to detect virus in mature circulating monocytes, which indicates that only a very small proportion or perhaps a sub-population of CD34 bone marrow progenitor cells are infected with HIV-1. At present it is difficult to link these findings with the observed haematological abnormalities seen in HIV-1 infection, although further studies of this subject need to be undertaken.

S M Forster

Differences in cytopathogenecity and host cell range among infectious molecular clones of human immunodeficiency virus type 1 simultaneously isolated from an individual
K SAKAI, S DEWHURST, X MA, DJ VOLSKY (New York, USA). *J Virol* 1988;**62**:4078–85.

Impaired neutrophil function in patients with AIDS or AIDS-related complex: a comprehensive evaluation
M ELLIS, S GUPTA, S GALANT, *et al* (Orange County, USA). *J Infect Dis* 1988;**158**: 1268–76.

Male genital tract inflammation associated with increased numbers of potential human immunodeficiency virus host cells in semen
H WOLFF, DJ ANDERSON (Boston, USA). *Andrologia* 1988;**20**:404–10.

In vitro susceptibilities and biotypes of *Candida albicans* isolates from the oral cavities of patients infected with human immunodeficiency virus

HC KORTING, M OLLERT, A GEORGII, M FRÖSCHL (Munich, Federal Republic of Germany). *J Clin Microbiol* 1988;**26**:2626–31.

Studies on the lipophilic yeast *Pityrosporum ovale* in HIV-seropositive and HIV-seronegative homosexual men

C HAKANSSON, J FAERGEMANN, G-B LÖWHAGEN (Gothenburg, Sweden). *Acta Derm Venereol (Stockh)* 1988;**68**:422–5.

Functional versus phenotypic analysis of T cells in subjects seropositive for the human immunodeficiency virus: a prospective study of in vitro responses to *Cryptococcus neoformans*

JF HOY, DE LEWIS, GG MILLER (Houston, USA). *J Infect Dis* 1988;**158**:1071–8.

The HIV *tat* gene induces dermal lesions resembling Kaposi's sarcoma in transgenic mice

J VOGEL, SH HINRICHS, RK REYNOLDS, PA LUCIW, G JAY (Rockville, USA). *Nature* 1988;**335**:606–11.

Kaposi's sarcoma cells: long-term culture with growth factor from retrovirus infected CD4+ T cells

S NAKAMURA, SZ SALAHUDDIN, P BIBERFIELD, *et al* (Bethesda, USA). *Science* 1988; **242**:426–9.

Angiogenic properties of Kaposi's sarcoma-derived cells after long-term culture in vitro

SZ SALAHUDDIN, S NAKAMURA, P BIBERFIELD, *et al* (Bethesda, USA). *Science* 1988;**242**: 430–3.

Role of human immunodeficiency virus and cytomegalovirus in AIDS encephalitis

CA WILEY, JA NELSON (La Jolla, USA). *Am J Pathol* 1988;**133**:73–81.

Surveillance of AIDS cases: how acceptable are the figures?

C DUFF, JP HUTCHBY (Huntingdon, England). *Br Med J* 1988;**297**:965.

The epidemiology of acquired immunodeficiency syndrome among heterosexuals

HW HAVERKOS, R EDELMAN (Rockville, USA). *JAMA* 1988;**260**:1922–9.

Human immunodeficiency virus infection in sexually active wives of infected haemophiliac men

HC KIM, K RASKA, L CLEMOW, *et al* (New Brunswick, USA). *Am J Med* 1988;**85**:472–6.

HIV in prisons

A McMILLAN (Edinburgh, Scotland). *Br Med J* 1988;**297**:873–4.

Mother-to-child transmission of HIV infection

EUROPEAN COLLABORATIVE STUDY (London, England). *Lancet* 1988;ii:1039–42.

Epidemiology, clinical features and prognostic factors of paediatric HIV infection

ITALIAN MULTICENTRE STUDY (Torino, Italy). *Lancet* 1988;ii:1043–5.

The case for routinely offering prenatal testing for human immunodeficiency virus

HL MINKOFF, SH LANDESMAN (New York, USA). *Am J Obstet Gynecol* 1988;**159**:793–5.

Human immunodeficiency virus infection among employees in an African hospital

B N'GALY, RW RYDER, K BILA, *et al* (Atlanta, USA). *N Engl J Med* 1988;**319**:1123–6.

A larger spectrum of severe HIV-1 related disease in intravenous drug users in New York City

RL STONEBURNER, DC DES JARLAIS, D BENEZRA, *et al* (New York, USA). *Science* 1988;**242**: 916–9.

This paper was prompted by the authors' observation of a large increase in deaths of intravenous drug abusers in New York city, which had not been reported as being due to AIDS, but which paralleled the epidemic of HIV infection. This increased mortality was investigated epidemiologically, which included reviewing medical records, reviewing histology of lung tissue of those who had died of pneumonia, reviewing AIDS registry data, and assessing the mortality in a cohort of intravenous drug abusers.

Of 7884 narcotics related deaths between 1978 and May 1987, 1803 were considered to be due to AIDS. The data from death certificates were matched to the New York city department of health surveillance registry. A proportion of the medical records where the cause of death was recorded as pneumonia, endocarditis, or tuberculosis were reviewed. HIV related conditions not meeting the AIDS surveillance case definition were oral thrush or lymphadenopathy with weight loss or chronic diarrhoea. Lung tissue of people with unspecified pneumonia was reviewed with appropriate staining techniques.

Yearly numbers of narcotics related deaths increased from 263 in 1978 to 1996 in 1986. The causes of death that accounted for the largest proportion of the increase were pneumonia, endocarditis, and tuberculosis. Deaths from overdose remained essentially stable. Findings suggestive of HIV infection were noted in 44% (22/50) of pneumonia deaths, 32% (7/22) of endocarditis deaths, and 69% (11/16) of tuberculosis deaths. Bacterial infections (such as pneumonia, endocarditis, and tuberculosis) are associated with HIV and, although aetiological agents were not found in many of the cases, most (92%, 77/84) of the pneumonia was not due to pneumocystis. Similar patterns of non-AIDS mortality have *not* been found in homosexual men. This may have been because of differences in class, race, exposure to likely pathogens, heavy use of alcohol, and perhaps inadequate health care. The effect of these postulated HIV related deaths on the New York city AIDS surveillance data would be to increase the total AIDS fatality rate by 50% and to increase the rate by 134% in intravenous drug abusers. In concluding their study, the authors suggest that work be undertaken to define better the exact causes of death to assess the extent of expansion required of the national AIDS case definition, and also to decide whether more precise diagnoses of certain infections in intravenous drug abusers can lead to more effective treatment and better survival of patients in this group. It would be interesting to study narcotics related deaths in other geographical areas with a different racial mix and different access to health care.

C A Murray

Surveillance of health care workers exposed to blood from patients infected with the human immunodeficiency virus

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Notification of HIV carriers: possible effect on uptake of AIDS testing

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ER BURNS, BZ KRIEGER, L BERNSTEIN, A RUBINSTEIN (New York, USA). *Pediatrics* 1988; **82**:763–5.

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Survival experience among patients with AIDS receiving zidovudine
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Zidovudine for the treatment of thrombocytopaenia associated with human immunodeficiency virus (HIV): a prospective study
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Activity of glucosidase inhibitors against HIV infections
AS TYMS, DL TAYLOR (London, England). *J Antimicrob Chemother* 1988;**22**:271–4.

Defects in cell-mediated immunity in HIV infection: implications for immunotherapy and vaccine development
MW LOWDELL, CM O'TOOLE (London, England). *Serodiagnosis and Immunotherapy* 1988;**2**:251–62.

Effects of passive immunisation in patients with the acquired immunodeficiency syndrome-related complex and acquired immunodeficiency syndrome
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Other sexually transmitted diseases

The structure, pathogenicity and genetics of *Haemophilus ducreyi*
DR JOHNSON, D ABECK, HA DAVIES (Harrow, England). *J Infect* 1988;**17**:99–106.

This paper reviews the results of recent research on the structure and genetics of *Haemophilus ducreyi* in the light of the continuing high prevalence of chancroid in the developing world. On the structure of the cell wall, several outer membrane proteins varying in weight from 27 to 60 kilodaltons are now recognised, and seven different strains of isolates can thus be identified. This will allow work on epidemiological studies to be carried out, but the role of these proteins in pathogenicity remains unknown. Variation between strains has also been noted in cell wall lipopolysaccharide (LPS). Virulent strains of *H ducreyi*, capable of producing necrotic lesions after being inoculated intradermally in rabbits, are resistant to the bactericidal activity of serum, and the structure of LPS appears to be important in determining this susceptibility.

Research into the genetics of *H ducreyi* has shown several plasmids conferring resistance to antimicrobial agents. Two plasmids, 5·7 and 7·0 megadaltons in weight, confer resistance to ampicillin and show similarities to the β-lactamase plasmid of *Neisseria gonorrhoeae*. Resistance plasmids for sulphonamides, tetracyclines, chloramphenicol, and aminoglycosides have also been discovered. In addition, a mobilising plasmid of 23·5 megadaltons capable of promoting conjugative transfer of the above plasmids has been described.

For the future, better typing of strains is required for more detailed epidemiological studies. Attempts to achieve this aim with immunological assays have been hampered by cross reactivity between strains, but such assays could form the basis of a diagnostic test for chancroid.

Further assessment of chromosomal genetics is required. There is still much ignorance regarding pathogenesis, and the possibility of an accurate virulence assay needs further exploration.

G Scott

Antibiotic susceptibilities and plasmid profiles of *Haemophilus ducreyi* isolates from southern Africa
D ABECK, AP JOHNSON, Y DANGOR, RC BALLARD (Harrow, England). *J Antimicrob Chemother* 1988;**22**:437–44.

Molecular epidemiology of molluscum contagiosum
J SCHOLZ, A RÖSEN-WOLFF, J BUGERT, *et al* (Heidelberg, Federal Republic of Germany). *J Infect Dis* 1988;**158**:898–9.

Amoebic liver abscess in a bisexual man
PJ STANLEY (Birmingham, England). *J Infect* 1988;**17**:163–6.

Genitourinary bacteriology

Bacterial vaginosis: a double-blind randomized trial of the effect of treatment of the sexual partner
MJ VEJTORP, AC BOLLERUP, L VEJTORP, *et al* (Hvidovre, Denmark). *Br J Obstet Gynaecol* 1988;**95**:920–6.

The concept that bacterial vaginosis is a sexually transmitted condition is now widely

accepted. Routine treatment of the asymptomatic male partner is not widely practised, however, as studies showing the value of such treatment have been few in number and limited in scope. In this large double blind controlled study, the authors compared the cure and recurrence rates in two groups of women with bacterial vaginosis whose male consorts were treated concurrently with either metronidazole or placebo. Patients were examined on admission and one and five weeks after starting treatment. The authors chose the treatment regimen of 1 g metronidazole on days 1 and 3, on the grounds of simplicity. Male partners were given a similar course or placebo on a double blind randomised basis.

Of 105 women evaluated at the end of the study, 95 (91%) were symptom free one week after starting treatment. At five weeks 79 (75%) still considered themselves to be cured or improved. Subjective cure rates at five weeks were 41/55 (75%) in the women whose male partners were treated with metronidazole and 39/55 (71%) in those whose partners received placebo. The standard diagnostic criteria of bacterial vaginosis were absent at five weeks in 41 (75%) of the metronidazole group and 39 (71%) of the placebo group. Recurrences, as diagnosed by the same criteria, were detected in 12/50 (24%) women whose partners had been treated with metronidazole and 12/48 (25%) whose partners had received placebo. *Gardnerella vaginalis* was detected in 89% of women who fulfilled the criteria for bacterial vaginosis. The isolation rate was 25% after one week and 33% after five weeks. The organism reappeared in 8/14 (20%) women whose partners had received metronidazole and in 13/38 (34%) whose partners had received placebo ($p > 0.05$).

Thus treatment of the male partner does not appear to have affected subjective symptoms, clinical signs, or isolation rates of *Gardnerella vaginalis* in this study. The authors argue that this finding speaks against the sexual transmission of specific pathogens sensitive to metronidazole as the only cause of bacterial vaginosis.

Another important finding in this study was the high prevalence (21%) of chlamydial infection in the group studied. Treatment for chlamydial infection did not affect the rate of cure of bacterial vaginosis.

S V Devendra

Public health

Prevention of transmission of human immunodeficiency virus in Africa: effectiveness of condom promotion and health education among prostitutes

EN NGUGI, FA PLUMMER, JN SIMONSEN (Nairobi, Kenya). *Lancet* 1988;ii:887–9.

Miscellaneous

Combined herpes simplex virus type 2 and human papillomavirus type 16 or 18 deoxyribonucleic acid leads to oncogenic transformation

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Multicentric intraepithelial neoplasia involving the vulva: clinical features and association with human papillomavirus and herpes simplex virus

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Polyamine inhibitors in antimicrobial chemotherapy

AS TYMS, JD WILLIAMSON, CJ BACCHI (London, England). *J Antimicrob Chemother* 1988;**22**: 403–28.